UN100

Remaking the world The Age of Global Enlightenment

Remaking the World Toward an Age of Global Enlightenment

The United Nations Centennial Initiative

UNITED NATIONS academic impact

Sharing a Culture of Intellectual Social Responsibility

BOSTON GLOBAL FORUM

IDEAS THAT MATTER.

Remaking The World

Toward An Age Of Global Enlightenment

NGUYEN ANH TUAN, EDITOR

BOSTON GLOBAL FORUM/UNITED NATIONS ACADEMIC IMPACT

2021

Sponsors

The United Nations Academic Impact (UNAI) is an initiative that aligns institutions of higher education with the United Nations to support the United Nations goals and mandates, including the promotion and protection of human rights, access to education, sustainability, and conflict resolution. UNAI represents a global diversity of regions and a thematic wealth of disciplines. Since its start in 2010, UNAI has created a diverse network of students, academics, scientists, researchers, think tanks, and institutions of higher education. Today, there are over 1400 member institutions in more than 147 countries that reach over 25 million people in the education and research sectors around the world.

UNAI's work is vital in achieving the United Nations' Sustainable Development Goals (SDG), as they serve as incubators of new ideas and solutions to the many global challenges we face. To ensure that the international community harnesses the innovation of young people and the research community, UNAI is committed to 10 basic education-related principles: Addressing Poverty, Capacity Building, Education for All, Global Citizenship, Access to Higher Education, Human Rights, Intercultural Dialogue, Peace and Conflict Resolution, Sustainability, and commitment to the principles in the United Nations Charter.

UNAI assists members by disseminating information on UN initiatives and activities, providing ideas on how these initiatives can be applied at the local level on college campuses, in classrooms and in communities as well as by providing a platform where university students, academics, and researchers can connect and share ideas to further the SDG and UNAI's 10 principles.

There is no fee for universities to join UNAI. The sole responsibility for members is to actively demonstrate support for at least one of the 10 UNAI principles or SDGs each year.

Boston Global Forum (BGF) was founded to bring together leaders and experts from all around the globe to participate in open public forums to discuss critical issues impacting the world at large. BGF's mission is to provide an interactive and collaborative world forum for identifying and developing action-based solutions to our most profound problems in this age. Areas in which BGF has operated in for the betterment of society include world peace, international cooperation, and human rights. To facilitate discussions, BGF hosts conferences for leaders and experts to identify the most pressing societal concerns and propose creative, practical solutions. In addition to hosting conferences, BGF also fosters cooperation amongst members and experts in their field by proposing initiatives and frameworks to be achieved throughout the forums.

Each year, discussions focus primarily on one topic a year and take place at venues on or near Harvard University as well as on BGF's online forum. BGF invites nominations and applications from individuals and organizations worldwide who believe they can make impactful contributions to the discussions.

The United Nations Centennial Initiative

The United Nations Centennial Initiative was launched in 2019 by the United Nations Academic Impact in partnership with The Boston Global Forum.

The UN Centennial programs host roundtable discussions and conferences to explore concepts and solutions as we look ahead to the global landscape in 2045—the United Nations Centennial year.

The initiative will examine issues surrounding technology, including artificial intelligence, cybersecurity, diplomacy, warfare, and other pressing concerns. Our goal is to look to the future and the role the United Nations can play in making our world more peaceful, democratic, prosperous, and universally secure.

The mission of UN Centennial Initiative and AI World Society is expressed in the initiative's title: Remaking the world – The Age of Global Enlightenment.

The website of the UN Centennial Initiative has resources on the AI World Society and other Boston Global Forum efforts to reshape the global landscape by 2045. The Initiative's roundtables and symposiums can be accessed on the website, which also includes other materials. Additional information on the United Nations Academic Impact, the Boston Global Forum, and AI World Society can also be found on the website.

You can access the United Nations Centennial's website at:
https://un100.net/ or https://UN2045.org/

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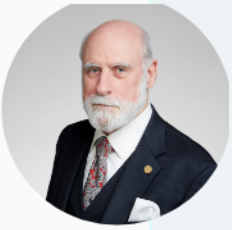

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Foreword

When my cherished friend Tuan Nguyen of the Boston Global Forum (BGF) and I spoke two years ago on how BGF and the United Nations Academic Impact (UNAI) could mark the 75th anniversary of the United Nations, his ever-restless mind raced forward and asked, "why not think of the UN at 100?" And so, this centennial project began, bringing into its fold some of the finest minds of our times, minds that have anticipated the world we live in today, its terrain of rose and thorn, minds possessed of imagination and reason in looking a quarter century ahead. UNAI was privileged to publish a series of these articles on our website, curated by Tuan, reflecting its mission of being a movement of minds.

Had we embarked on such an exercise in 1995, could we have been better prepared for the extraordinary pace in which our world has moved since then? More particularly, could we have anticipated, and even created the opportunities of collective, concerted global action, infused by the spirit of the United Nations, to protect us from dangers we foresaw and to seize the possibilities then dimly on horizon?

The United Nations came into being as a cerebral, as much as political, innovation, the very first resolution of its General Assembly, in the January of 1946, was on the "problems arising from the discovery of atomic energy." 75 years later, in the January of 2021, Governor Michael Dukakis announced the "Artificial Intelligence International Accord Initiative" whose goal he described as "to stimulate a global conversation that will make sure AI is used responsibly by governments and the private sector around the world." It is precisely conversations of that nature this volume, and BGF Roundtables over the past months, have fostered. Conversations that will continue in the quarter century ahead, shaping a world governed by international law and the exercise of international as much as individual, and indeed intellectual, responsibility (which UNAI seeks to foster) where the creativity and innovation of the human person work to shape a world worthy of our times just as surely as that world works to foster and further, in the phrase of our Charter, the "dignity and worth" of that human person.

Ramu Damodaran

Chief, United Nations Academic Impact (UNAI)
Co-Chair BGF-UNAI Centennial Initiative in Honor of the United Nations 2045 Centenary

New York, New York
May 22, 2021

Foreword

Nothing is more urgent than peace and security in the world, and no organization is better positioned to promote it than is the United Nations. That has been true since its inception in 1945, although the lesson of the last seventy-five years is that the UN's mandate must be enlarged if it is to fulfill the ideals on which it was founded. The task between now and the UN's centennial in 2045 is the remake the UN so that it can play an even larger role in remarking the world.

This book offers ideas that can inform that effort. The ideas are meant to stimulate thought and discussion. Some of the ideas will undoubtedly, and properly, fall by the wayside during the deliberative process. Other ideas, not in this book, will come to the fore. A great deal of thought and experience went into the founding of the United Nations, and that kind of effort is needed once again as we consider how to enhance this remarkable institution.

Michael Dukakis

- *Chair and Co-Founder, Boston Global Forum*
- *Chair, Michael Dukakis Institute for Leadership and Innovation*
- *Three-term governor of Massachusetts*

On behalf of the Boston Global Forum, I want to thank the distinguished women and men who have contributed to the book. In one form or another, they have dedicated their careers to the service of others, and to the common good, and their essays and speeches reflect that dedication.

A special thank you is due to the book's editor, Nguyen Anh Tuan. He envisioned the book project and assembled and guided the contributors. His commitment to world peace and security is unflagging, and the book is yet another testament to his dedication.

Brookline, Massachusetts
June 15, 2021

Nguyen Anh Tuan

- *CEO of the Boston Global Forum (BGF)*
- *Director of the Michael Dukakis Institute for Leadership and Innovation (MDI)*
- *Co-Founder of the AI World Society, Founder and Former Editor in Chief of VietNamNet*

Introduction

In New York in 2019, I met with Ramu Damodaran, Chief of the United Nations Academic Impact, to discuss how his organization and the Boston Global Forum could collaborate on an initiative that would strengthen the United Nations. I suggested that we work to advance pioneering ideas that could help reshape the world as the United Nations progressed toward its centennial in 2045. Ramu embraced the idea, and we created the "United Nations Centennial – Boston Global Forum and the United Nations Academic Impact Initiative."

As part of that effort, we decided to prepare a book dedicated to such ideas. We chose to title it, "Remaking the world – the Age of Global Enlightenment." The book would propose pathways toward a more humane, peaceful, and secure world, largely by harnessing the potential of Artificial Intelligence (AI), blockchain, and other Digital Age technologies. A key proposal is the adoption of an AI International Accord that would bind nations to constructive uses of AI and prohibit destructive uses. The book proposes a Social Contract for the AI Age as the theoretical and ethical foundation of the Accord. The book also proposes the AI World Society (AIWS) as a vehicle through which individuals and civic organizations can help foster an Age of Global Enlightenment. The joint effort of governments, institutions, organizations, and people is required if the world is to be reshaped to be a more humane, peaceful, and secure place.

I am grateful to the leaders and thinkers whose ideas inform the book. A special thank you is due to Ramu Damodaran for his support of the book project; Governor Michael Dukakis, who heads the Boston Global Forum and has inspired much of my work; Professor Thomas Patterson, who brought me to the Harvard Kennedy School's Shorenstein Center, co-founded the Boston Global Forum, and has been a constant source of friendship and advice; and Professor Nazli Choucri for her contributions to the book and the Boston Global Forum.

The book includes original documents, speeches and remarks delivered at conferences organized or co-organized by Boston Global Forum, and "white papers" on concepts and principles for AI and the Digital Age. I have organized the book into two sections. The first addresses the standards that should govern the development and use of AI and digital technology. The second explores what is needed to create a reimagined world. The appendices include related documents and photos from some of the events that contributed to what is contained in the book. Several of the book's chapters are documents that were multi-authored as part of the Boston Global Forum's effort to advance the ethical and productive application of AI. In the table of contents, these documents are identified as authored by the Boston Global Forum.

In preparing the book for publication, I had the assistance of Diane Tran, Larissa Zutter and Megan Wan. I am deeply thankful for their help.

Finally, I am thankful beyond words to Phan Thi Yen, my wife; my daughters Nguyen Thi Lan Anh and Nguyen Phan Nguyet Minh; and my son-in-law Hoang Trong Ton. A more supportive family is beyond imagination. They have helped at every step of my Boston journey, from the formation of the Boston Global Forum nine years ago to the preparation of this book. And I am deeply grateful for the lifetime of love and support given me by my mother Nguyen Thi Thanh Hong and father Nguyen Du. Their guidance and encouragement started me on the path of public service.

Boston, Massachusetts
May 21, 2021

Part I

Toward an Age of Global Enlightenment: AI Social Contract

01

Social Contract for the AI Age: Standards for a Peaceful, Secure, and Prosperous World

BOSTON GLOBAL FORUM

This Social Contract was developed by Boston Global Forum's Michael Dukakis, Vaira Vīķe-Freiberga, Vint Cerf, Nazli Choucri, Zlatko Lagumdzija, Tuan Anh Nguyen, Thomas Patterson, Alex Pentland, Marc Rotenberg, David Silbersweig

I. A New Social Contract in the Age of Artificial Intelligence

The term "artificial intelligence" refers to the development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, language translation, and self-driving cars. Advances in AI have already altered conventional ways of seeing the world around us. This is creating new realities for everyone – as well as new possibilities.

These advances in AI are powerful in many ways. They have created a new global ecology and yet remain opaque and need to be better understood. Advances in AI raise policy issues that must be assessed. We must now focus through dialogue, tolerance, learning and understanding on key principles and practices for an agreement among members of society for shared social benefit that we call the Social Contract for the AI Age.

The expansion of Artificial Intelligence is widely recognized and could change our lives in ways yet unimagined. At the same time, without guidelines or directives, the undisciplined use of AI poses risks to the wellbeing of individuals and creates possibilities for economic, political, social, and criminal exploitation.

The international community recognizes the challenges and opportunities, as well as the problems and perils, of AI. Many countries have announced national strategies to promote the proper use and development of AI. These strategies set out common goals such as:

- Scientific research, funding, and culture
- Sustainable development, and inclusive growth
- Skills, education, and talent development
- Public and private sector adoption
- Fairness, transparency, and accountability
- Ethics, values, and inclusion
- Reliability, security, and privacy
- Science-policy links
- Standards, human control, and regulations
- Data and digital infrastructure

AI is also the focus of foreign policy and international cooperation. There is a shared view that no country will be able to compete or meet the needs of its citizens without increasing its AI capacity. As well, many countries are now engaged in technology leapfrogging. It is no longer expected, nor necessary, to replicate the stages of economic development of the West—one phase at a time.

In a world as diverse as the one today, there are few mechanisms for responding to such possibilities on a global scale. Social Contract for the AI Age is designed to establish a common understanding for policy and practices, anchored in general principles to help maximize the "good" and minimize the "bad" associated with AI. Derived from the 18 century concept of a social contract—an agreement among the members of society to cooperate for social benefits—Social Contract for the AI Age focuses on the conditions of the 21 century. It is a response to artificial intelligence, big data, the Internet of Things, and high-speed computation.

Foundations

Just as earlier social contracts helped shape societies for a common purpose, the Social Contract for the AI Age has a transformative vision, one that transcends the technological features of artificial intelligence and seeks to provide foundations for a new society. Consider, for example, how the Covid-19 pandemic urgently requires a new society with new structure and order, approach -- new ways to share data and coordinate action, accelerated social reliance on digital service across businesses, education, and government services. The Social Contract for the AI Age would create standards for a new international system. It focuses on the conduct of each nation, relations with international business and not for profit entities, and the cooperation of nations. Just as TCP/IP is the platform for communication among internet users, the Social Contract for AI Age is a platform for connection among governments, stakeholders, and private and public institutions.

Objectives

The Social Contract for the AI Age seeks to build a multi-stakeholder, inclusive society in all aspects of life across politics, government, economics, business, and industry. The Social Contract for the AI Age values creation, innovation, philanthropy, and mutual respect. It seeks the right of freedom on, and access to, the Internet worldwide. The Social Contract for the AI Age seeks to make the world a locus of responsible interaction—a place where every person's contribution is recognized and everyone has a right to knowledge and access to information, where no one is above the law, where money cannot be used to subvert political process, and where integrity, knowledge, creativity, honesty, and tolerance shape decisions and guide policy.

In short, the Social Contract for the AI Age seeks to build a world where all are recognized and valued, and all forms of governance adhere to a set of values and are accountable and transparent. It is a world where global challenges are met by collective action and responsibility.

II. Principles

Extensive and appropriate AI application to politics, governments, society, and businesses can create a Smart Democracy. The Social Contract for the AI Age creates a platform for a Smart Democracy society, and a new global supply chain, named Supply Chain 2020. As a framework for society in the AI Era, the Social Contract for the AI Age is based on balancing power among governments, businesses, civil society, individuals, and AI assistants. The Social Contract for the AI Age is a commitment to protect property, common values, and collective norms.

1. AI must respect fundamental human rights such as human dignity, rule of law, and privacy protection.

2. AI systems must be considered from a multi-stakeholder perspective for the individual and for society as a whole

3. The Social Contract for the AI Age is a basis to achieve sustainable and inclusive development for a global community that is fair, equitable, and prosperous. It is designed to apply the concept of a people-centered economy and to create a trustworthy AI, data, and Internet ecosystem for work and life.

4. The Social Contract for the AI Age should be transparent and accountable, and follow standards based on policies driven by trustworthy data. The UN Sustainable Development Goals data metrics and the World Economic Forum Environmental, Social, and Governance (ESG) metrics, should provide citizens and organizations with reliable data that enables well-informed policy choices.

5. Communities must have control over their data. Data is the basis of self-determination and provides the ability to measure the impact of actions and policy in the AI realm.

6. Data literacy at all levels of society, together with open, trustworthy information, is the basis for an intelligent, thoughtful society.

III. Commitments of Stakeholders/Power Centers

1. Individuals, Citizens, Groups

Everyone is entitled to basic rights and dignity that are enhanced/promoted by AI.

Data Rights and Responsibilities

- Each individual has the right to privacy and is entitled to access and control over their own data. Individuals have a right to manage their data, individually or collectively, and the right to withhold their data from businesses.
- Each individual and each community must have access to a trustworthy AI, data, and Internet ecosystem to create an inclusive, fair, people-centered economy, and society.

Internet Rights

- Each individual has the right to access the Internet and any website or news system without restriction.
- Freedom of expression on the Internet is guaranteed.
- Secure digital identity allows the individual to know about, and control access to their data.

Education and Political Participation

- Each individual has the right to education through best available venues.
- Each individual must have access to education/knowledge/ training about the use and impact of AI.
- Each individual has the right to unimpeded political participation.
- Everyone must have access to due process and fair trial, as well as remediation for injustice.

Responsibility:

- Individuals are prohibited from exercising socially disruptive behaviors, such as hacking, disseminating disinformation or online hate.
- Individuals must contribute to the common good through appropriate taxes and provision of critical personal information (with appropriate data protection) as, for example, in the collection of census data and voting for public officials.

2. Governments

Governments have a leading role in the Social Contract for the AI Age.

All government should behave responsibly in the management of AI for governance and for interactions with individuals and such behavior must be easily auditable.

All governments should implement AI governance policies that respect honesty, transparency, fairness, and accountability. These standards and norms apply in every area of governance and are the basis for collaboration with international communities

All governments should create incentives for citizens to use AI in ways that benefit society (for example each person who does good work for society will be recognized as value, and this value can be exchanged with other values such as financial value, products, services, etc.).

All governments should construct a secure, stable, and trustworthy AI, data, and Internet ecosystem for work and life to support the people-centered economy.

All governments should ensure that communities are able to take control of their data and use AI with their data so that they can manage their community to suit their needs and to create prosperity for themselves and their family.

All governments should establish norms, rules, and pass laws to ensure AI benefits society.

All governments should create a secure safety net for citizens in a trustworthy AI, data, and Internet ecosystem for work and life.

All governments protect intellectual property rights without undermining free access to the information commons.

Collaborations between governments

Norms, values, and standards of the Social Contract for the AI Age are designed as connections among governments. To maintain the Social Contract for the AI Age, it is essential for countries to establish a Democratic Alliance for Digital Governance. All governments should work to promote the Democratic Alliance for Digital Governance.

United Nations and International Organizations

The United Nations should extend international human rights standards for AI and create a UN Convention on AI and establish a specialized UN Agency on AI.

3. Business Entities

Business operations and related rights come with accountability and responsibility – nationally and internationally.

Business must:

Enable independent audits for transparency, fairness, accountability, and cybersecurity.

Adopt common AI values, standards, norms, and data ownership rules with penalties for noncompliance.

Companies will be incentivized to do business only with companies and countries that uphold the Social Contract for the AI Age and endorse Supply Chain 2020.

Collaborate with governments and civil society to help create a people-centered AI, data, and Internet ecosystem, to create trustworthy and relevant data, and to use AI to share wealth with individuals and communities.

4. Civil Society Organizations & Community

Rights and responsibilities of civil society organizations

Include:

- Monitor governments and firms with respect to common values.
- Promote common values, norms, standards, and laws.
- Support AI users and assist them to serve the broad interests of society.
- Collaborate with governments, business entities, and others to create a people centered AI, data, and Internet ecosystem for work and life, enabling all people can create meaningful data, value, and create value-based wealth for their community.
- Enable data cooperatives—the voluntary collaborative pooling by individuals of their personal data for the benefit of the group or community.
- Participate in the making of AI rules and norms.
- Enhance civil society become an intelligent, thoughtful civil society based on knowledge, smart data, critical thinking, and social responsibility; and through the achievement of data literacy, to become a trusted open-data system, with validated, predictive AI tools that communities to plan their future.

5. AI Assistants

AI assistants provide an interface to facilitate compliance with established standards.

- Support AI users and assist them to serve the broad interests of society.
- Engage with other power centers for mutual support and supervision.
- Community control, AI assistants should be governed by communities of users.

IV. Implementation

The Social Contract for the AI Age will be implemented as follows:

The promulgation of a Code of Ethics for AI Developers and AI Users.

The creation of a system to monitor and evaluate governments, companies, and individuals (based on their contribution to maintaining norms, standards, common values, and international laws for honesty, transparency, accountability, and responsibility).

The recognition of the Social Contract for the AI Age by the United Nations, governments, companies, civil society, and the international AI community.

The establishment of a United Nations Convention on Artificial Intelligence to obligate governments and others to comply with international rules and norms to protect rights in AI Age.

The development of the Democratic Alliance for Digital Governance as the global authority to enforce the Social Contract for the AI Age.

The creation of the "AIWS City"—an all-digital virtual city based on the standards and norms of "the Social Contract for the AI Age", "People Centered Economy", "Trustworthy Economy", "AI-Government", and "Intellectual Society-Thoughtful Civil Society".

02

Framework for an AI International Accord

NAZLI CHOUCRI, MIT PROFESSOR

I. Emergent global Challenges

Advances in information and communication technologies – global Internet, social media, Internet of Things, and a range of related science-driven innovations and generative and emergent technologies – continue to shape a dynamic communication and information ecosystem for which there is no precedent.

These advances are powerful in many ways. Foremost among these in terms of salience, ubiquity, pervasiveness, and expansion in scale and scope is the broad area of artificial intelligence. They have created a new global ecology; yet they remain opaque and must be better understood—an ecology of "knowns" that is evolving in ways that remain largely "unknown." Especially compelling is the acceleration of Artificial Intelligence – in all its forms – with far-ranging applications shaping a new global ecosystem for which there is no precedent.

This chapter presents a brief view of the most pressing challenges, articulates the logic for worldwide agreement to retain the rule of law in the international system, and presents salient features of an emergent International Accord on Artificial Intelligence. The Framework for **Artificial Intelligence International Accord (AIIA)** is an initial response to this critical gap in the system of international rules and regulations.

II. New Reality - New "Unknowns"

The term "artificial intelligence" refers to the theory and development of computer systems able to perform tasks that normally require human intelligence—such as visual perception, speech recognition, decision-making, translation between languages, self-driving cars, and so forth. It also spans efforts to establish machine-human brain connectivity in ways that are highly exploratory and whose implications are yet to be articulated to any great extent.

We are at the beginning of a new era, a world of mind-machine convergence. Its current logic, situated at the frontiers of biological intelligence and machine intelligence, is generally anchored in past data and has made possible whole new sources and forms of design space. Fully understanding the scale of the AI domain remains elusive. We have seen a shift from executing instructions by humans to replicating humans, outperforming humans, and transcending humans.

Almost everyone appreciates that advances in AI have already altered conventional ways of viewing and managing the world around us. We have created new realities for everyone—as well as new possibilities. Nonetheless, when all is said and done, the "intelligence" that is "artificial" remains devoid of autonomous consciousness, empathy, and perhaps select other human features – such as ethics –so fundamental to humanity and the social order. It goes without saying that, sooner or later, humans will program machines to generate what we consider consciousness to be. Already we are seeing major efforts and assessments in that direction.

The expansion of Artificial Intelligence is widely recognized and could change our lives in ways yet unimagined. This expansion has created a new global ecology, one that remains opaque and poorly understood.

III. Call for Accord on Artificial Intelligence

The world of artificial intelligence today is framed by a set of unknowns – known unknowns and unknown unknowns – where technological innovations interact with the potential for the total loss of human control. Especially elusive is the management of embedded insecurities in applications of this new, ubiquitous technology and the imperatives of safety and sustainability.

But without adequate guidelines and useful directives, the undisciplined use of AI poses risks to the wellbeing of individuals and creates fertile ground for economic, political, social, and criminal exploitation. The international community recognizes the challenges and opportunities, as well as the problems and perils, associated with AI. Many countries have already announced national strategies to promote the proper use and development of AI. At the operational level, there are as yet no authoritative modes and methods for reviewing and regulating algorithms. This is yet another "open" space, in the full sense of the word.

We are now faced with a critical imperative, namely, to address head-on the policy issues raised by AI advances and to assess, evaluate, and respond effectively. We must engage in serious dialogue – buttressed by tolerance, learning, and mutual understanding – to converge on principles and practices of an agreement among members of the global society on a strategy to generate and enhance social benefits and wellbeing for all, shared by all.

At the core of this imperative is to establish a common understanding of policy and practice, anchored in general principles to help maximize the "good" and minimize the "bad" associated with AI. Given such ambiguities and uncertainties, it is not surprising that the international community has not yet fully grasped the implications of the new “unknowns” and the potential threats to the global order.

While individually, as well as jointly, these new capacities transcend the prevailing frameworks for maintaining order – nationally or internationally – on balance, the overall patterns appear not to generate a semblance of order. Some countries have developed national policies for the cyber domain, most notably regarding cybersecurity, Others may be in the process. Different countries may impose different measures, individually or collectively, but for the most part new innovations and novel applications remain largely unregulated.

We have created new tradeoffs that must be assessed. We must now focus on critical principles and essential supporting practices for the new and emerging world that we have created. We must also envisage fundamental “best practices” for realities that have yet to emerge.

1. Toward a Worldwide Consensus

We must now re-think and consolidate the best practices for human development, recognizing the power and value of the individual and of society. Much yet is to be done.

An added factor is that AI is also becoming a focus for foreign policy and international cooperation. There is a shared view that no country will be able to compete or meet the needs of its citizens without increasing its AI capacity. At the same time, many countries are now engaged in technology leapfrogging. It is no longer expected, nor necessary, to replicate the stages of economic development of the West—one phase at a time. While the possibilities are varied and diverse, there is also is a clear awareness of the challenges and opportunities, as well as the problems and perils of and many are seeking ways of managing their approach to AI. At least 20 countries have announced formal strategies to promote the use and development of AI.

No two strategies are alike; however, there are common themes even among countries who focus on different aspects of AI policy. The most common themes addressed include those pertaining to scientific research, talent development, skills formation, public and private collaboration, visualization for innovation, and data standards and regulation, among others.

Transcending the diversity of situations and orientations, there is a solid foundation of shared goals in the international community, buttressed by the activities of United Nations agencies to facilitate operational strategies and assist in implementation of objectives. These include a general appreciation of skills, education, and talent development, public and private policy innovation, attention to fairness, transparency, and accountability, ethics and values of inclusion, reliability, security and privacy, science-policy links, standards for regulations and data development, and digital infrastructure.

In sum, all countries are going through a common experience of adapting to and managing unknowns. All of these venues are generally framed within an overarching context of sustainable development. All of this creates an international atmosphere welcoming of an International Accord on Artificial Intelligence on a global scale.

2. Logic for AI International Accord

There is a long tradition of consensus-based social order founded on cohesion and agreement, and not the use of force nor formal regulation or legislation. It is often a necessary precursor for managing change and responding to societal needs.

The foundational logic addresses four premises: What, Why, Who and How?

What?

An international agreement on AI is about supporting a course of action that is inclusive and equitable. It is designed to focus on relationships among people, governments, and other key entities in society.

Why?

To articulate prevailing concerns and find common convergence. To frame ways of addressing and managing potential threats – in fair and equitable ways.

Who?

- In today's world, framing an international accord for AI must be inclusive of:
- Individuals as citizens and members of a community
- Governments who execute citizen goals
- Corporate and private entities with business rights and responsibilities
- Civil society that transcends the above
- AI innovators and related technologies, and
- Analysts of ethics and responsibility.
- None of the above can be "left out." Each of these constitutes a distinct center of power and influence, and each has rights and responsibilities.

How?

The starting point for implementation consists of five basic principles to provide solid anchors for Artificial Intelligence International Accord.

(1) **Fairness and Justice for All**
The first principle is already agreed upon in the international community as a powerful aspiration. It is the expectation of all entities – private and public – to treat, and be treated, with fairness and justice.

(2) **Responsibility and accountability for policy and decision—private and public**
The second principle recognizes the power of the new global ecology that will increasingly span all entities worldwide—private and public, developing and developed.

(3) **Precautionary principle for innovations and applications**
The third principle is well established internationally. It does not impede innovation but supports it. It does not push for regulation but supports initiatives to explore the unknown with care and caution.

(4) **Ethics-in-AI**
Fourth is the principle of ethical integrity—for the present and the future. Different cultures and countries may have different ethical systems, but everyone, everywhere recognizes and adopts some basic ethical precepts. At issue is incorporating the commonalities into a global ethical system for all phases, innovations, and manifestations of artificial intelligence.

Jointly, these four foundations – What, Why, Who, How – create powerful foundations for framing and implementing an emergent **Artificial Intelligence International Agreement.**

IV. Artificial Intelligence International Accord

The AIIA Draft Framework recognizes pathbreaking initiatives – notably the Budapest Convention on Cybercrime and the European Union General Directive – that signal specific policies to protect the integrity of information and the values that support this integrity. In addition, it recognizes the ongoing deliberations in the European Union regarding the future of AI and best means of supporting EU objectives, as well as those of member states. Then, too, the Draft Framework acknowledges the deliberations of the United States National Commission on Artificial Intelligence, and the Report of its results.

Consistent with the legal principle of a rules-based international community, the Draft Framework consists of several initial procedural and operational strategies, as follows:

(1) Preamble to highlight critical values and conditions to help clarify the underlying commonalities among all signatory entities supporting an AIIA of worldwide scale and scope.

(2) Framework Design to define the parameters of structure and process for further global deliberation and refinement.

(3) Operational Measures to buttress pragmatic as well as aspirational purposes, and Support System for realizing, formalizing and implementing an International as well as Global and International Accord on Artificial Intelligence.

Each calls for some articulation.

1. Preamble

The Preamble to the AIIA Framework is predicated on critical premises that reflect important features of the results-based system that defines today's international community, and are assumed to be operative at the drafting of the Framework. These are assumptions that enable framing of further order, and are stated as follows:

- Recognizing accelerated innovations in and applications of AI in diverse facets of the human condition. All advances and applications thereof must be coupled with, and adhere to, the internationally recognized precautionary principle.

- Supporting the international community's commitment to human rights. The potential harms on society inflicted by unrestrained uses of AI must be prevented in all contexts and situations everywhere.

- Convinced of the salience of rights, commensurate attention must be given to responsibilities.

- Understanding the differences and discrepancies among countries in computational skills and innovations in AI, a worldwide AI educational initiative must be designed to enable "full recognition" of all challenges surrounding AI.

- Respecting the diversity of the international community, all parties, public and private, all measures for implementation will be taken by national authorities.

- Acknowledging that that the dearth of guidelines may evolve into chaotic and undisciplined conditions that undermine benefits of AI to society by enabling exploitation and damage.

2. Framework Design

Consistent with the principles the provisions of the Budapest Convention on Cybercrime as well as the EU General Directives, and respecting the Social Contract for the AI Age, the AIIA draft framework is conceived and designed as:

- A multi-stakeholder, consensus-based international agreement to establish common policy and practice in development, use, implementation and applications of AI
- Anchored in the balance of influence and responsibility among governments, businesses, civil society, individuals, and other entities.
- Respectful of national authority and international commitments and requires assurances of rights and responsibilities for all participants and decision-entities.

To consolidate the design into a formal International Accord, it is essential to:

- Review legal frameworks for AI at various levels of aggregation to identify elements essential for an international AI legal framework.
- Recognize methods to prevent abuses by governments and businesses in uses of AI, Data, Digital Technology, and Cyberspace (including attacks on companies, organizations, and individuals, and other venues of the Internet).
- Consolidate working norms to manage all aspects of AI innovations, and
- Construct and enable response-systems for violations of rights and responsibilities associated with the development, design, applications, or implementation of AI

V. Process and Essential Measures

Given that "unrestricted use" of AI is not deemed acceptable by the international community, and a "total ban" may be unreasonable at this point, the Draft Framework for AIIA puts forth a set of measures for immediate review, assessment, refinement, and adoption by the international community. These measures are addressed to actors and entities.

1. Individual Rights and Responsibilities

The scope of rights includes:

- Rights pertaining to Data and the Internet
- Rights to digital and AI related education
- Rights to political participation in AI policy deliberations
- Right to avoid digital damages

And with rights, come responsibilities to:

- Avoid digital damages
- Contribute to the common good
- Participate in codes of digital ethics
- Remain cognizant of AI applications
- Refrain from use of malware or distribution of misinformation

2. Imperatives for National Policy

Governments are required to:

- Implement the AI governance policies, standards, and norms adopted by the international community
- Provide education for all citizens – "real" or online – with advanced AI technology
- Design incentives and directives for responsible AI use
- Protect intellectual property rights without undermining free access to the information commons

3. Collaborations among States

Inter-state collaboration is required to:

- Support shared AI policies and common goals
- Enable international measures by creating national policies and instruments
- Reinforce protection of human rights in AI innovations and uses
- Develop common principles and methods to contain and combat misinformation
- Recognize the Social Contract for the AI Age
- Establish a Worldwide Alliance toward Digital Governance

4. United Nations and International Organizations

These entities are expected to:

- Enable and support sustained data collection and analysis
- Provide guidelines for worldwide AI knowledge and education
- Create support systems for global digital ethics
- Establish international legal foundations for management of AI
- Convene all willing entities to participate in the framing and forging international judicial systems devoted to AI applications
- Contribute to the United Nations Centennial, notably a Global Enlightenment Prize and international Lecture
- Reinforce the AIWS City initiatives to develop and evaluate a People Centered-Economy

5. Business Entities

National and international business are expected to:

- Enable independent audits for transparency, fairness, accountability, and cybersecurity
- Adopt common AI values, standards, norms, and data ownership rules with penalties for noncompliance
- Collaborate with governments, civil society, and international organizations to help create a people-centered AI, data, and Internet ecosystem
- Support sanction-systems to enforce a rules-based international order

6. Civil Society

Rights and responsibilities of civil society organizations include:

- Monitoring governments and firms in support of common values and standards
- Enabling all forms of voluntary data, analytics and other cooperatives, including the pooling by individuals of their personal data for the benefit of the group or community, conforming to international norms
- Supporting an intelligent, thoughtful development and use of knowledge, as well as institutional opportunities for knowledge

VI. The Support System for AIIA Framework

Based on the internationally recognized Precautionary Principle, the support system for AIIA Framework is expected to facilitate and formalize the Framework and its implementation. The supports include the following products and processes:

- Code of Ethics for AI Developers and AI Users.
- Operational systems to monitor AI performance by governments, companies, and individuals
- Certification for AI Assistants to enable compliance to new standards.
- Establish a multidisciplinary scientific committee to provide independent review and assessment of innovations in AI and directives for safe and secure application, consistent with human rights and other obligations
- Enable a Social Contract for the AI Age to be supported by United Nations, governments, companies, civil society and the international community
- Consolidate World Alliance for Digital Governance as the global authority to enforce the emergent accord

VII. End Note:

Challenges, Opportunities, Next Steps

This End note addresses briefly some salient challenges, followed by highlights of opportunities, and concludes with a brief word of caution.

1. The Challenges

echnology and innovation are growing much faster than the regulatory framework anywhere, and most certainly at the international levels. Of course, we do not want regulations to change at the level of technological change – that would create chaos; you can imagine why and how.

We can expect innovations in AI to grow much faster than has been the case so far – due in large part to new generations being educated in AI early on. We tend to think that the key players are in the AI arena are companies, governments, and academic researchers. We are overlooking youth as the growth-asset that will buttress both society and AI in the decades to come. It is foolhardy to ignore what are likely to be the real challenges, namely, the scale and scope of (a) unknowns, and (b) unknown "unknowns," and (c) their intended and unintended consequences, individually and collectively.